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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,701	04/21/2004	Kazuro Okuzawa	MAT-8173US1	5384

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EXAMINER

DABNEY, PHYLESHA LARVINIA

ART UNIT PAPER NUMBER

2646

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/828,701

Applicant(s)

OKUZAWA ET AL

Examiner

Phylesha L. Dabney

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the application filed on 21 April 2004 in which claims 1-3 and 8-10 are pending, and claims 4-7 were cancelled.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sone (U.S. Patent No. 5,432,758), in view of Loctite (World Design Handbook 2nd Edition).

Regarding claims 1 and 8, Sone teaches a manufactured electro-acoustic transducer comprising the steps of: providing a frame (4); forming an adhesive layer on the frame col. 5 lines 37-39); forming a frame-magnet laminate by disposing a magnet (26, col. 5 lines 37-39) on the frame with the adhesive layer in between; and disposing a diaphragm (30) above said magnet. Sone does not specifically teach the adhesive material used to attach the electrical components, i.e. magnet, heatsinks, etc. Loctite teaches using a heat and UV curing adhesive to bond/attach via applying the adhesive to the surfaces, using UV light to cure the components, and applying a secondary curing system, such as heat, for curing areas of the adhesive where the UV missed (Loctite Handbook, second edition 2.2.2, 2.2.6, article: "Light Curing-Bonds that Last", page 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the

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invention was made to use a heat and UV curing adhesive for quick setting and insuring complete cure. Furthermore, the combination of references does not teach a portion of the adhesive layer as being exposed outside (crept out) of the magnet. However, the examiner takes official notice that it is well known in the art of attaching electrical components to frames to allow a portion of the adhesive material to be exposed outside of the components for increasing the adhesion area thus achieving the desired bond strength. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the adhesive material of the combination of references to be partially exposed to increase the bond strength.

Regarding claims 2 and 9, the combination teaches a case (28) is integrally molded with the frame (4), further comprising a step of bonding a resonance case (2) to the case integrally molded with the frame.

Regarding claims 3 and 10, the combination teaches the resonance case (2) is provided with a sound hole (fig. 1).

Response to Arguments

Applicant's arguments have been fully considered but they are not persuasive.

A legible copy of each cited foreign patent document has not been received with respect to the information disclosure statement filed 4/21/04.

With respect to the applicant's arguments pertaining the references not supporting the adhesive layer being UV irradiated from above the magnet before heat curing. The examiner disagrees. The Loctite World Wide Design Handbook (paragraph 186) teaches that the UV irradiation occurs prior to the heat curing to prevent "slumping."

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Furthermore, the Loctite reference (paragraph 193) teaches that the UV irradiation is applied used a UV lamp on exposed areas (crept out adhesive).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phylesha L. Dabney whose telephone number is 571-272-7494. The examiner can normally be reached on Mondays, Tuesdays, Wednesdays, Fridays 8:30-4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

October 5, 2005

PLD



SINH TRAN
SUPERVISORY PATENT EXAMINER